

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|-------------------------------------------------|-------------------------------------------------------|------------------|---------|------------------|
| S1 | 0 | trichsanthin | USPAT | OR | OFF | 2004/09/09 09:52 |
| S3 | 10 | trichosanthin.clm. | USPAT | OR | OFF | 2004/09/09 10:09 |
| S4 | 2 | trichosanthin.clm. AND leukemia | USPAT | OR | OFF | 2004/09/09 09:56 |
| S5 | 0 | trichosanthin.clm. AND leukemia. clm. | USPAT | OR | OFF | 2004/09/09 09:57 |
| S6 | 1 | trichosanthin.clm. AND leukemia. clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/09/09 09:58 |
| S7 | 0 | trichosanthin.clm. AND ectopic ADJ pregnancy | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/09/09 09:58 |
| S8 | 7 | (ectopic ADJ pregnancy).clm. | USPAT | OR | OFF | 2004/09/09 10:09 |
| S9 | 155 | trichosanthin | USPAT | OR | OFF | 2004/12/03 11:12 |
| S10 | 10 | trichosanthin.clm. | USPAT | OR | OFF | 2004/12/03 11:14 |
| S11 | 2 | trichosanthin.clm. AND leukemia | USPAT | OR | OFF | 2004/12/03 11:12 |
| S12 | 2 | trichosanthin.clm. AND leukemia. clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/12/03 11:12 |
| S13 | 7 | (ectopic ADJ pregnancy).clm. | USPAT | OR | OFF | 2004/12/03 11:12 |
| S14 | 1 | ke-yi-bao.in. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2004/12/03 11:14 |
| S15 | 1 | nie-hui-ling.in. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2004/12/03 11:18 |
| S16 | 7 | "5077390" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2004/12/03 11:24 |
| S17 | 3 | "5532214" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2004/12/07 18:59 |

| | | | | | | |
|-----|-----|---------------------------------|-------------------------------------------------------|----|-----|------------------|
| S18 | 5 | 435/69.1.ccls. AND tricosanthin | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2004/12/03 12:49 |
| S19 | 21 | "5128460" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2004/12/03 12:54 |
| S20 | 2 | WO-9012097-\$ did. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2004/12/03 12:58 |
| S23 | 2 | WO-9640867-\$ did. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2004/12/07 19:30 |
| S24 | 186 | bao-y\$.in. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2004/12/07 19:30 |
| S25 | 0 | bao-y\$.in. AND trichosanthin | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2004/12/07 19:30 |
| S26 | 155 | trichosanthin | USPAT | OR | OFF | 2004/12/07 19:39 |
| S27 | 3 | 530/300.ccls. AND trichosanthin | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2004/12/07 19:40 |

FILE 'CAPPLUS, TOXCENTER, SCISEARCH, EMBASE, MEDLINE, BIOSIS, USPATFULL,
DGENE, BIOTECHNO, DRUGU, ESBIOBASE' ENTERED AT 18:26:44 ON 07 DEC 2004

L3 2573 S TRICHOSANTHIN
L4 1205 DUP REM L3 (1368 DUPLICATES REMOVED)
L5 383 S L4 AND (MUTATION OR MODIFICATION OR DELETION OR INSERTION OR
L6 286 S L4 AND (MUTATION OR MODIFICATION)
L7 1 S L4 AND AMINO(W)ACID(W)MODIFICATION
L8 10 S L4 AND LOW(W)ANTIGENICITY
L9 2 S L4 AND TOYOKAWA,S/AU

FILE 'STNGUIDE' ENTERED AT 18:41:35 ON 07 DEC 2004

=>

* * * * * * * * * * Welcome to STN International * * * * * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 SEP 01 INPADOC: New family current-awareness alert (SDI) available
NEWS 4 SEP 01 New pricing for the Save Answers for SciFinder Wizard within
STN Express with Discover!
NEWS 5 SEP 01 New display format, HITSTR, available in WPIDS/WPINDEX/WPIX
NEWS 6 SEP 27 STANDARDS will no longer be available on STN
NEWS 7 SEP 27 SWETSCAN will no longer be available on STN
NEWS 8 OCT 28 KOREAPAT now available on STN
NEWS 9 NOV 18 Current-awareness alerts, saved answer sets, and current
search transcripts to be affected by CERAB, COMPUAB, ELCOM,
and SOLIDSTATE reloads
NEWS 10 NOV 30 PHAR reloaded with additional data
NEWS 11 DEC 01 LISA now available on STN

NEWS EXPRESS OCTOBER 29 CURRENT WINDOWS VERSION IS V7.01A, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 18:20:28 ON 07 DEC 2004

=> registry trichosanthin
REGISTRY IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 0.42 | 0.42 |

FILE 'REGISTRY' ENTERED AT 18:21:35 ON 07 DEC 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 DEC 2004 HIGHEST RN 792236-36-3
DICTIONARY FILE UPDATES: 5 DEC 2004 HIGHEST RN 792236-36-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> e trichosanthin

| | | |
|-----|--------|---------------------|
| E1 | 109 | TRICHOSANTHES/BI |
| E2 | 52 | TRICHOSANTHI/BI |
| E3 | 52 --> | TRICHOSANTHIN/BI |
| E4 | 2 | TRICHOSANTHINS/BI |
| E5 | 2 | TRICHOSANTHOSIDE/BI |
| E6 | 1 | TRICHOSANTOL/BI |
| E7 | 3 | TRICHOSARCINA/BI |
| E8 | 3 | TRICHOSE/BI |
| E9 | 2 | TRICHOSETIN/BI |
| E10 | 1 | TRICHOSETINE/BI |
| E11 | 1 | TRICHOSETINE/BI |
| E12 | 15 | TRICHOSIDE/BI |

=> s e4

L1 2 TRICHOSANTHINS/BI

=> d 11

L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2004 ACS on STN

RN 109191-07-3 REGISTRY *

* Use of this CAS Registry Number alone as a search term in other STN files may result in incomplete search results. For additional information, enter HELP RN* at an online arrow prompt (=>).

CN Glycoproteins, specific or class, β -trichosanthins (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glycoproteins, β -trichosanthins

OTHER NAMES:

CN β -Trichosanthin

CN Glycoproteins (specific proteins and subclasses),
 β -trichosanthins

MF Unspecified

CI MAN, CTS

SR CA

LC STN Files: AGRICOLA, BIOSIS, MEDLINE, NAPRALERT, PHAR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

=> d 11 2

L1 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2004 ACS on STN

RN 60318-52-7 REGISTRY *

* Use of this CAS Registry Number alone as a search term in other STN files may result in incomplete search results. For additional information, enter HELP RN* at an online arrow prompt (=>).

CN Proteins, specific or class, trichosanthins (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Trichosanthin

OTHER NAMES:
CN α-Trichosanthin
CN Proteins, trichosanthins
CN Tian Hua Fen
CN Trichosanthins
DR 120367-43-3, 88026-75-9
MF Unspecified
CI MAN, CTS
LC STN Files: ADISINSIGHT, AGRICOLA, ANABSTR, BIOTECHNO, CA, CANCERLIT,
CAPLUS, CBNB, CHEMCATS, CIN, EMBASE, IPA, MEDLINE, MRCK*, NAPRALERT,
PROUSDDR, RTECS*, TOXCENTER
(*File contains numerically searchable property data)
DT.CA CAplus document type: Conference; Journal

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

=> d his

(FILE 'HOME' ENTERED AT 18:20:28 ON 07 DEC 2004)

FILE 'REGISTRY' ENTERED AT 18:21:35 ON 07 DEC 2004
E TRICHOSANTHIN

L1 2 S E4

=> help rn*

CAS Registry Numbers appended with an asterisk (*) represent substances of unknown or variable composition, complex reaction products, or biological substances that do not meet the criteria for CA indexing. These substances generally have been registered for regulatory agencies and receive a CA Index Name. They have a special code of CTS or GRS in the Class Identifier (CI) field. The information in the Locator (LC) field and/or Source of Registration field (SR) provides an indication of the reason for registration.

To search for these substances in STN files, use the Registry Number(s) from the record, terms derived from the name, terms that are more or less specific than those in the name (which may include other CAS Registry Numbers), or associated trade names.

In the CA File, substances with the GRS code are usually indexed as indefinite derivatives at the Registry Number for the part of the molecule for which the structure is known. These Registry Numbers have a D appended in the CA File and are followed by a phrase describing the derivative information, for example, 92-52-4D, chloro derivs. To search for the GRS substances in the CA File, use the derivative or related term(s) linked to the Registry Number for the specific part of the molecule with D appended.

For additional help in determining the Registry Numbers and names to use to search for these substances, contact the help desk that serves your area.

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

FULL ESTIMATED COST

| SINCE FILE ENTRY | TOTAL SESSION |
|------------------|---------------|
| 10.49 | 10.91 |

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,

AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDHS,
BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB,
CROPU, DDFB, DDFU, DGENE, DISSABS, ...' ENTERED AT 18:24:59 ON 07 DEC 2004

75 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s trichosanthin

| | |
|-----|------------------|
| 30 | FILE ADISCTI |
| 1 | FILE ADISINSIGHT |
| 37 | FILE AGRICOLA |
| 6 | FILE ANABSTR |
| 32 | FILE BIOBUSINESS |
| 10 | FILE BIOCOMMERCE |
| 17 | FILE BIOENG |
| 244 | FILE BIOSIS |
| 36 | FILE BIOTECHABS |
| 36 | FILE BIOTECHDHS |
| 103 | FILE BIOTECHNO |
| 74 | FILE CABA |
| 45 | FILE CANCERLIT |
| 490 | FILE CAPLUS |
| 9 | FILE CEABA-VTB |
| 1 | FILE CEN |
| 11 | FILE CIN |
| 9 | FILE CONFSCI |
| 3 | FILE CROPU |
| 6 | FILE DDFB |
| 94 | FILE DDFU |
| 144 | FILE DGENE |
| 11 | FILE DISSABS |
| 6 | FILE DRUGB |
| 99 | FILE DRUGU |
| 1 | FILE EMBAL |
| 283 | FILE EMBASE |
| 96 | FILE ESBIOBASE |
| 1 | FILE FEDRIP |
| 1 | FILE FROSTI |

38 FILES SEARCHED...

| | |
|-----|------------------|
| 1 | FILE FSTA |
| 10 | FILE GENBANK |
| 28 | FILE IFIPAT |
| 8 | FILE IMSDRUGNEWS |
| 3 | FILE IMSRESEARCH |
| 6 | FILE JICST-EPLUS |
| 75 | FILE LIFESCI |
| 247 | FILE MEDLINE |
| 91 | FILE PASCAL |
| 2 | FILE PHAR |
| 1 | FILE PHARMAMI |
| 24 | FILE PHIN |
| 51 | FILE PROMT |
| 1 | FILE PROUSDDR |
| 312 | FILE SCISEARCH |
| 318 | FILE TOXCENTER |
| 237 | FILE USPATFULL |
| 17 | FILE USPAT2 |
| 37 | FILE WPIDS |
| 37 | FILE WPINDEX |

50 FILES HAVE ONE OR MORE ANSWERS, 75 FILES SEARCHED IN STNINDEX

L2 QUE TRICHOSANTHIN

=> d rank

| | | |
|-----|-----|-------------|
| F1 | 490 | CAPLUS |
| F2 | 318 | TOXCENTER |
| F3 | 312 | SCISEARCH |
| F4 | 283 | EMBASE |
| F5 | 247 | MEDLINE |
| F6 | 244 | BIOSIS |
| F7 | 237 | USPATFULL |
| F8 | 144 | DGENE |
| F9 | 103 | BIOTECHNO |
| F10 | 99 | DRUGU |
| F11 | 96 | ESBIOBASE |
| F12 | 94 | DDFU |
| F13 | 91 | PASCAL |
| F14 | 75 | LIFESCI |
| F15 | 74 | CABA |
| F16 | 51 | PROMT |
| F17 | 45 | CANCERLIT |
| F18 | 37 | AGRICOLA |
| F19 | 37 | WPIDS |
| F20 | 37 | WPINDEX |
| F21 | 36 | BIOTECHABS |
| F22 | 36 | BIOTECHDS |
| F23 | 32 | BIOBUSINESS |
| F24 | 30 | ADISCTI |
| F25 | 28 | IFIPAT |
| F26 | 24 | PHIN |
| F27 | 17 | BIOENG |
| F28 | 17 | USPAT2 |
| F29 | 11 | CIN |
| F30 | 11 | DISSABS |
| F31 | 10 | BIOCOMMERCE |
| F32 | 10 | GENBANK |
| F33 | 9 | CEABA-VTB |
| F34 | 9 | CONFSCI |
| F35 | 8 | IMSDRUGNEWS |
| F36 | 6 | ANABSTR |
| F37 | 6 | DDFB |
| F38 | 6 | DRUGB |
| F39 | 6 | JICST-EPLUS |
| F40 | 3 | CROPU |
| F41 | 3 | IMSRESEARCH |
| F42 | 2 | PHAR |
| F43 | 1 | ADISINSIGHT |
| F44 | 1 | CEN |
| F45 | 1 | EMBAL |
| F46 | 1 | FEDRIP |
| F47 | 1 | FROSTI |
| F48 | 1 | FSTA |
| F49 | 1 | PHARMAML |
| F50 | 1 | PROUSDDR |

| => file f1, f2, f3, f4, f5, f6, f7, f8, f9, f10, f11 | SINCE FILE ENTRY | TOTAL SESSION |
|------------------------------------------------------|------------------|---------------|
| COST IN U.S. DOLLARS | | |
| FULL ESTIMATED COST | 1.71 | 12.62 |

FILE 'CAPLUS' ENTERED AT 18:26:44 ON 07 DEC 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'TOXCENTER' ENTERED AT 18:26:44 ON 07 DEC 2004
COPYRIGHT (C) 2004 ACS

FILE 'SCISEARCH' ENTERED AT 18:26:44 ON 07 DEC 2004
Copyright (c) 2004 The Thomson Corporation.

FILE 'EMBASE' ENTERED AT 18:26:44 ON 07 DEC 2004
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.

FILE 'MEDLINE' ENTERED AT 18:26:44 ON 07 DEC 2004

FILE 'BIOSIS' ENTERED AT 18:26:44 ON 07 DEC 2004
Copyright (c) 2004 The Thomson Corporation.

FILE 'USPATFULL' ENTERED AT 18:26:44 ON 07 DEC 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'DGENE' ENTERED AT 18:26:44 ON 07 DEC 2004
COPYRIGHT (C) 2004 THE THOMSON CORPORATION

FILE 'BIOTECHNO' ENTERED AT 18:26:44 ON 07 DEC 2004
COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'DRUGU' ENTERED AT 18:26:44 ON 07 DEC 2004
COPYRIGHT (C) 2004 THE THOMSON CORPORATION

FILE 'ESBIOBASE' ENTERED AT 18:26:44 ON 07 DEC 2004
COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.

=> s trichosanthin
L3 2573 TRICHOSANTHIN

=> dup rem l3
DUPLICATE IS NOT AVAILABLE IN 'DGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING IS APPROXIMATELY 43% COMPLETE FOR L3
PROCESSING IS APPROXIMATELY 82% COMPLETE FOR L3
PROCESSING COMPLETED FOR L3
L4 1205 DUP REM L3 (1368 DUPLICATES REMOVED)

=> s L4 and (mutation OR modification OR deletion OR insertion OR addition)
8 FILES SEARCHED...
L5 383 L4 AND (MUTATION OR MODIFICATION OR DELETION OR INSERTION OR
ADDITION)

=> d 15 383 ti abs

L5 ANSWER 383 OF 383 DRUGU COPYRIGHT 2004 THE THOMSON CORP on STN
TI Intraamniotic Injection of Ethacridine for Second-Trimester Induction of
Labor.
AN 1984-02796 DRUGU M S
AB Intraamniotic ethacridine (E, Rivanol) was found to be a safe, successful
and simple technique for the induction of 2nd trimester abortion in 10302
women and rarely required the **addition** of i.v. oxytocin.
Failure rate increased with gestation period. Misinjection resulted in 2
cases of peritonitis and E may induce placental accreta in subsequent
pregnancies. Obstetric experience with E was compared with abortion

induced by **trichosanthin**, water balloon, hypertonic saline, diterpenoid esters, Herba andrographitis, alcohol and PGE2.

ABEX 10302 Women presenting for 2nd-trimester abortion were given up to 0.1 g intraamniotically by amniocentesis. contraindications were gestational age less than 14 or greater than 26 wk, liver or kidney dysfunction and pyrexia and elevated WBC. The progress of induced labor was assessed by cervical dilatation, cessation of fetal heartbeat and change in the membranes. Prophylactic antibiotics were given if the membranes were already ruptured and i.v. oxytocin in the absence of contractions after 24 hr or to promote delivery. Overall success rate was 96.4%, with no maternal deaths. success rates at less than 16 wk, 16-20 wk, 21-26 wk, 27-30 wk and over 30 wk were 90, 99, 98, 100 and 75% respectively with induction times of 37-63 hr. 1 Patient was misinjected into an ovarian cyst and another into the peritoneal cavity and uterine cornua, causing peritonitis in both cases. Urinary estriol in 28 women showed a decline from 7.35 to 2.28 mg/24 hr after abortion with E. The inherent antimicrobial activity of E may have contributed to a lower incidence of secondary infection. Previous work had shown PGF2 -alpha and PGE levels were increased 114.9 and 31.3 times respectively, and the PGF2-alpha:PGE ratio was raised from 1.78 to 6.59 during E-induced abortion. (J.M.M.).

=> S L4 and (mutation or modification)

L6 286 L4 AND (MUTATION OR MODIFICATION)

=> d 16 283-286 ti abs

L6 ANSWER 283 OF 286 DGENE COPYRIGHT 2004 The Thomson Corp on STN

TI DNA encoding pro-ribosome inactivating proteins - inactive precursors of ribosome inactivating proteins; can be expressed in eukaryotic cells without causing cell death

AN AAT79867 DNA DGENE

AB AAT79867 encodes a single chain maize pro-ribosome inactivating protein (proRIP) having a truncated leader sequence and carboxy terminus engineered for expression in Escherichia coli and which binds to immunoglobulin IgG. The construct has a sequence encoding the single antibody binding region (ABR) domains from Staphylococcus aureus antibody binding Protein A (ABR-A) and Streptococcal Group G protein G (ABR-G) inserted into a BamHI site. The sequence contains no linker separating the alpha and beta subunit regions and was shown to be a potent inhibitor of protein synthesis and bound specifically to IgG. proRIP sequences can be engineered to contain a selectively removable internal peptide linker sequence separating the alpha and beta units of the RIP protein to form an inactive form of RIP. When separated the two units regain activity and are capable of inactivating eukaryotic ribosomes and hence preventing protein production. Many different Panacoideae RIPs may be produced with an internal linker including: Barley Translation Inhibitor, **Trichosanthin**, Ricin A-chain, Abrin-A A-chain, Saporin, SLT-1, Luffin A, MAP, Ricinus communis agglutinin, Momordin, PAP-S, Luffin-B and Dianthin 30. The RIPs can be used in the construction of therapeutic toxins targeted to specific cells such as tumour cells via the attachment of a targeting polypeptide, e.g. a monoclonal antibody. A further use is in HIV therapy (see US4869903). There is interest in expressing RIP recombinantly in host eukaryotic cells, because of the capacity to provide correct post-translational processing. However, RIPs effectively inhibit protein synthesis in eukaryotic cells resulting in cell death. Since the proRIP proteins are not cytotoxic to eukaryotic cells, they can be recombinantly expressed in such cells and then converted to active RIP proteins. (Updated on 25-MAR-2003 to correct PF field.)

L6 ANSWER 284 OF 286 DGENE COPYRIGHT 2004 The Thomson Corp on STN

TI DNA encoding pro-ribosome inactivating proteins - inactive precursors of

ribosome inactivating proteins; can be expressed in eukaryotic cells without causing cell death

AN AAT79866 DNA DGENE

AB AAT79866 encodes a single chain maize pro-ribosome inactivating protein (proRIP) having a truncated leader sequence and carboxy terminus engineered for expression in Escherichia coli and which binds to immunoglobulin IgG. The construct has a sequence encoding the single antibody binding region (ABR) domain from Staphylococcus aureus antibody binding Protein A (ABR-A) inserted into a BamHI site. The sequence contains no linker separating the alpha and beta subunit regions and was shown to be a potent inhibitor of protein synthesis and bound specifically to IgG. proRIP sequences can be engineered to contain a selectively removable internal peptide linker sequence separating the alpha and beta units of the RIP protein to form an inactive form of RIP. When separated the two units regain activity and are capable of inactivating eukaryotic ribosomes and hence preventing protein production. Many different Panacoideae RIPs may be produced with an internal linker including: Barley Translation Inhibitor, **Trichosanthin**, Ricin A-chain, Abrin-A A-chain, Saporin, SLT-1, Luffin A, MAP, Ricinus communis agglutinin, Momordin, PAP-S, Luffin-B and Dianthin 30. The RIPs can be used in the construction of therapeutic toxins targeted to specific cells such as tumour cells via the attachment of a targeting polypeptide, e.g. a monoclonal antibody. A further use is in HIV therapy (see US4869903). There is interest in expressing RIP recombinantly in host eukaryotic cells, because of the capacity to provide correct post-translational processing. However, RIPs effectively inhibit protein synthesis in eukaryotic cells resulting in cell death. Since the proRIP proteins are not cytotoxic to eukaryotic cells, they can be recombinantly expressed in such cells and then converted to active RIP proteins. (Updated on 25-MAR-2003 to correct PF field.)

L6 ANSWER 285 OF 286 DGENE COPYRIGHT 2004 The Thomson Corp on STN

TI DNA encoding pro-ribosome inactivating proteins - inactive precursors of ribosome inactivating proteins; can be expressed in eukaryotic cells without causing cell death

AN AAT79865 DNA DGENE

AB AAT79865 encodes a single chain maize pro-ribosome inactivating protein (proRIP) having a truncated leader sequence and carboxy terminus engineered for expression in Escherichia coli. The sequence contains no linker separating the alpha and beta subunit regions and was shown to be a potent inhibitor of protein synthesis. proRIP sequences can be engineered to contain a selectively removable internal peptide linker sequence separating the alpha and beta units of the RIP protein to form an inactive form of RIP. When separated the two units regain activity and are capable of inactivating eukaryotic ribosomes and hence preventing protein production. Many different Panacoideae RIPs may be produced with an internal linker including: Barley Translation Inhibitor, **Trichosanthin**, Ricin A-chain, Abrin-A A-chain, Saporin, SLT-1, Luffin A, MAP, Ricinus communis agglutinin, Momordin, PAP-S, Luffin-B and Dianthin 30. The RIPs can be used in the construction of therapeutic toxins targeted to specific cells such as tumour cells via the attachment of a targeting polypeptide, e.g. a monoclonal antibody. A further use is in HIV therapy (see US4869903). There is interest in expressing RIP recombinantly in host eukaryotic cells, because of the capacity to provide correct post-translational processing. However, RIPs effectively inhibit protein synthesis in eukaryotic cells resulting in cell death. Since the proRIP proteins are not cytotoxic to eukaryotic cells, they can be recombinantly expressed in such cells and then converted to active RIP proteins. (Updated on 25-MAR-2003 to correct PF field.)

L6 ANSWER 286 OF 286 DGENE COPYRIGHT 2004 The Thomson Corp on STN

TI Recombinant **trichosanthin** protein - with selective inhibitory

effect on viral expression in HIV infected T-cells or monocytes/macrophage.

AN AAQ06346 DNA DGENE
AB Synthetic gene containing unique restriction sites spaced 20 to 90 bp apart. Introduction of mutations is facilitated by cassette replacement. The effect of **mutations** on inhibitory action can be investigated. For example, a double mutant containing the amino acid substitutions Glu(160) to Asp and Arg(163) to Lys was found to be almost 3 logs less active at inhibiting in vitro translation in rabbit reticulocyte lysate. See also AAQ06343-5 and AAQ06347-Q06351.

=> d his

(FILE 'HOME' ENTERED AT 18:20:28 ON 07 DEC 2004)

FILE 'REGISTRY' ENTERED AT 18:21:35 ON 07 DEC 2004
E TRICHOSANTHIN

L1 2 S E4

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOPARTNERS, BIOPARTNERS, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS,' ENTERED AT 18:24:59 ON 07 DEC 2004
SEA TRICHOSANTHIN

30 FILE ADISCTI
1 FILE ADISINSIGHT
37 FILE AGRICOLA
6 FILE ANABSTR
32 FILE BIOPARTNERS
10 FILE BIOPARTNERS
17 FILE BIOENG
244 FILE BIOSIS
36 FILE BIOTECHABS
36 FILE BIOTECHDS
103 FILE BIOTECHNO
74 FILE CABA
45 FILE CANCERLIT
490 FILE CAPLUS
9 FILE CEABA-VTB
1 FILE CEN
11 FILE CIN
9 FILE CONFSCI
3 FILE CROPU
6 FILE DDFB
94 FILE DDFU
144 FILE DGENE
11 FILE DISSABS
6 FILE DRUGB
99 FILE DRUGU
1 FILE EMBAL
283 FILE EMBASE
96 FILE ESBIOWARE
1 FILE FEDRIP
1 FILE FROSTI
1 FILE FSTA
10 FILE GENBANK
28 FILE IFIPAT
8 FILE IMSDRUGNEWS
3 FILE IMSRESEARCH
6 FILE JICST-EPLUS

75 FILE LIFESCI
247 FILE MEDLINE
91 FILE PASCAL
2 FILE PHAR
1 FILE PHARMAML
24 FILE PHIN
51 FILE PROMT
1 FILE PROUSDDR
312 FILE SCISEARCH
318 FILE TOXCENTER
237 FILE USPATFULL
17 FILE USPAT2
37 FILE WPIDS
37 FILE WPINDEX
L2 QUE TRICHOSANTHIN

FILE 'CAPLUS, TOXCENTER, SCISEARCH, EMBASE, MEDLINE, BIOSIS, USPATFULL,
DGENE, BIOTECHNO, DRUGU, ESBIOBASE' ENTERED AT 18:26:44 ON 07 DEC 2004

L3 2573 S TRICHOSANTHIN
L4 1205 DUP REM L3 (1368 DUPLICATES REMOVED)
L5 383 S L4 AND (MUTATION OR MODIFICATION OR DELETION OR INSERTION OR
L6 286 S L4 AND (MUTATION OR MODIFICATION)